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Corporate Environmental Programs General Electric Company 100 Woodlawn Avenue, Pittsfield, MA 01201

Transmitted Via Overnight Delivery

December 15, 2004

Mr. William P. Lovely, Jr. U.S. Environmental Protection Agency EPA New England (MC HBO) One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site
Floodplain Residential and Non-Residential Properties Adjacent to
1½ Mile Reach of Housatonic River (GECD710 and GECD720)
Proposal for Non-PCB Pre-Design Investigations – Phase 4 Floodplain Properties,
Group 4A – Parcel I7-1-101

Dear Mr. Lovely:

On July 14, 2004, the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) a document titled *Work Plan Addendum – Phase 4 Floodplain Properties, Group 4A* (Work Plan Addendum), which presented the proposed pre-design soil investigations for polychlorinated biphenyls (PCBs) to be conducted at the properties within Phase 4, Group 4A of the floodplain residential and non-residential properties adjacent to the 1½ Mile Reach of the Housatonic River (1½ Mile floodplain properties). Those properties are shown on Figure 1. The Work Plan Addendum was conditionally approved by EPA in a letter to GE dated December 3, 2004. Condition Number 4 of EPA's conditional approval letter required GE to provide a sampling proposal for non-PCB constituents listed in Appendix IX of 40 CFR Part 264 plus three additional constituents (benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine) (Appendix IX+3) at one of these properties – Parcel I7-1-101 (Fred Garner Park) – within 15 days of the date of that letter. Accordingly, GE has developed this Proposal for Non-PCB Investigations to describe the proposed evaluation areas (also known as averaging areas) at Parcel I7-1-101 that will be subject to future Removal Design/Removal Action (RD/RA) evaluations.

### 1. RD/RA Evaluation Areas

Condition Number 2 of EPA's December 3, 2004 conditional approval letter requires that Parcel I7-1-101 be divided into two separate evaluation (averaging) areas. These evaluation areas were shown on a figure that EPA provided to GE on November 16, 2004. Figures 2 and 3 attached to this letter illustrate the two evaluation areas specified by EPA. In addition, in accordance with Condition Number 1 of EPA's December 3, 2004 conditional approval letter, Figures 2 and 3 have been revised to include the revised top-of-bank boundary provided to GE by EPA on November 10, 2004.

### 2. Proposed Non-PCB Soil Investigations

As indicated in EPA's conditional approval letter and confirmed by GE's preliminary review of the existing PCB data within Group 4A (shown on Figure 2), it appears that remediation actions will be necessary to address PCBs at Parcel I7-1-101, and specifically within each of the two evaluation areas

located within that property. Accordingly, GE is proposing to conduct non-PCB soil sampling and analysis activities to support future RD/RA activities for each of those evaluation areas. These activities will involve the collection of 35 soil samples from 13 locations, as shown on Figure 3. Of these proposed samples, 13 will be surface samples (0- to 1-foot depth) and 22 will be collected from subsurface soils. Similar to the PCB investigations described in the Work Plan Addendum, subsurface soil samples will be collected from 1- to 3-foot, 3- to 6-foot, 6- to 10-foot, and 10- to 15-foot depth increments, as shown in Table 1. Analyses of the subsurface soil samples for non-PCB constituents will be conducted in an iterative manner, with those samples located between 1 and 6 feet (12 of the 22 subsurface samples) subject to initial analysis. Analysis of the samples collected from deeper increments will be contingent on the results of the PCB investigations presented in the Work Plan Addendum. For example, if the PCB results for the 3- to 6-foot depth increment at an evaluation area do not define the vertical extent of PCBs, then all of the PCB and non-PCB samples collected from the 6- to 10-foot depth increment within that evaluation area will be analyzed.

GE proposes to analyze the non-PCB samples for Appendix IX+3 semivolatile organic compounds (SVOCs), inorganics, and polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (PCDDs/PCDFs). Based on a review of the existing Appendix IX+3 data from Group 4A provided in Tables 2 and 3, and consistent with the Appendix IX+3 sampling and analysis performed at the Phase 3 floodplain properties, analysis of these samples for volatile organic compounds (VOCs), pesticides, or herbicides is not warranted.

It should also be noted that preliminary review of the existing data from the Group 4A properties indicates that remediation actions will likely not be required to address PCBs at the other Group 4A properties – Parcels I7-1-2 and I7-1-5. Therefore, consistent with the *Statement of Work for Removal Actions Outside the River* (pp. 69-70) and the EPA-approved approach for such properties in Phases 1 and 2 of the 1½ Mile floodplain properties, GE is not proposing sampling and analysis for non-PCB constituents within these parcels.

### 3. Future Activities and Proposed Schedule

In accordance with EPA's December 3, 2004 conditional approval letter, GE will initiate the sampling described in this proposal following receipt of approval from EPA, and will submit a Pre-Design Investigation Report (PDI Report) within three months of the date of EPA's approval of this proposal. The PDI Report will include the results of the PCB investigations specified in the Work Plan Addendum and the non-PCB investigations proposed herein. This schedule is subject to revision if weather conditions preclude the timely completion of the sampling or if EPA's activities relating to the  $1\frac{1}{2}$  Mile Reach Removal Action preclude the collection of the samples at the designated locations.

Please contact Dick Gates or me with any questions.

Sincerely, Andrew 15:1fer/Ace

Andrew T. Silfer, P.E. GE Project Coordinator

Attachments

V:\GE\_Housatonic\_Mile\_and\_Half\Reports and Presentations\Phase 4 Group 4A\75642196.doc

cc: Dean Tagliaferro, EPA
Rose Howell, EPA\*
Holly Inglis, EPA
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Public Information Repositories
GE Internal Repository

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# **Tables**



# TABLE 1 SUMMARY OF PROPOSED NON-PCB SAMPLING LOCATIONS AND ASSOCIATED DEPTH INTERVALS

PROPOSAL FOR NON-PCB PRE-DESIGN INVESTIGATIONS - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1-1/2 MILE REACH GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

SAMPLE ID	DEPTH INCREMENT (FEET)				
	0-1	1-3	3-6	6-10	10-15
PARCEL 17-1-101					
4A-SB-3	X		X	Υ	
4A-SB-5	X	X			
4A-SB-6	X	**	X		Y
4A-SB-12	Χ	X		Υ	e= <del></del>
4A-SB-13	Χ	X		**	es wh
4A-SB-14	Χ		X		Y
4A-SB-15	X	W. 44	X		Y
4A-SB-16	Χ	**	X	Υ	**
4A-SB-17	Χ	X		Y	
4A-SB-20	Χ	X			Υ
4A-SB-21	Χ		X		Υ
4A-SB-23	X	X		Y	**
4A-SS-19	X	***			***

### Notes

- 1. X Indicates proposed sampling depth for samples to be analyzed for SVOCs, inorganics, and PCDDs/PCDFs.
- 2. Y Indicates proposed sampling depth for samples to be held for possible future analysis of above constituents.
- 3. -- = No sample proposed for collection.
- 4. Proposed sample locations are shown on Figure 3.

【2、20年の1997年 アンダスに発し、日本は20年2年 1月1日 リージェント・・・・	
Volatile Organics	
None Detected	
Semivolatile Organics	
Benzo(a)anthracene	0.10 J
Benzo(a)pyrene	0.099 J
Benzo(b)fluoranthene	0.098 J
Benzo(g,h,i)perylene	0.060 J
Benzo(k)fluoranthene	0.054 J
Chrysene	0.10 J
Fluoranthene	0.15 J
Indeno(1,2,3-cd)pyrene	0.059 J
Phenanthrene	0.080 J
Pyrene	0.19 J
Furans	
2,3,7,8-TCDF	0.000012 Y
TCDFs (total)	0.000061
1,2,3,7,8-PeCDF	0.0000055 J
2,3,4,7,8-PeCDF	0.0000077
PeCDFs (total)	0.000064
1,2,3,4,7,8-HxCDF	0.000010
1,2,3,6,7,8-HxCDF	0.0000057 J
1,2,3,7,8,9-HxCDF	ND(0.00000022)
2,3,4,6,7,8-HxCDF	ND(0.0000023)
HxCDFs (total)	0.000041
1,2,3,4,6,7,8-HpCDF	0.000022
1,2,3,4,7,8,9-HpCDF	0.0000037 J
HpCDFs (total) OCDF	0.000048 0.000034
Total Furans	0.00025
Dioxins	0.00023
2,3,7,8-TCDD	ND(0.0000053)
TCDDs (total)	ND(0.00000052) 0.00000062
1,2,3,7,8-PeCDD	ND(0.0000030)
PeCDDs (total)	ND(0.0000030)
1,2,3,4,7,8-HxCDD	ND(0.00000052)
1,2,3,6,7,8-HxCDD	ND(0.0000010)
1,2,3,7,8,9-HxCDD	ND(0.0000088)
HxCDDs (total)	0.0000040
1,2,3,4,6,7,8-HpCDD	0.000018
HpCDDs (total)	0.000035
OCDD	0.00017
Total Dioxins	0.00021
Total TEQs (MDEP TEFs)	0.000018
Total TEQs (WHO TEFs)	0.00000741
Total TEQs (EPA TEFs)	0.000076
Inorganics	
Arsenic	5.30
Barium	30.6
Beryllium	0.350 B
Cadmium	0.420 B
Chromium	13.3
Cobalt	15.4
Copper	18.4
Lead	14.7
Mercury	0.0570 B
Nickel	22.2
Selenium	0.540 B
Thallium	1.90
Vanadium	16.8
Zinc	69.2

PROPOSAL FOR NON-PCB PRE-DESIGN INVESTIGATIONS - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1-1/2 MILE REACH GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS (Results are presented in dry weight parts per million, ppm)

### Notes:

- 1. Samples were submitted to Quanterra Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
- 2. ND Analyte was not detected. The number in parentheses is the associated detection limit.
- 3. With the exception of dioxin/furans, only detected constituents are summarized.
- Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
- 5. Indicates that all constituents for the parameter group were not detected.

### Data Qualifiers:

### Organics (volatiles, semivolatiles, dioxin/furans)

- J Indicates that the associated numerical value is an estimated concentration.
- Y 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

### Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

Sample Depth(Feot):   Dist Collected:   11/10/98   11/11/98   11	Location ID:	F0218802	F0219004	F0219006
Parameter   Date Collected:   11/10/98	Sample ID:	H2-F0218802-0-0000	H2-F0219004-0-0000	H2-F0219006-0-0000
Semivolatile Organics	그 그 그 그는 그는 가는 이를 잃어가면 사내가 될 것만만 생활을 됐어요? 그런데요 그는	그 그 그 보다는 그 사람에 생생한 생활한 생활한 경기를 보고 있다. 그는 사람		▮ コープ・アー・アケー コッター むしむ みょうかっち アカッピ しおきゃ
12.44 Techlorobenzene		(		[ 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1,4-Dichlorobenzene		0.10.1	0.022.1	I 0.024 I
2-Mofflyinaphthalene				
ND(0.91)   ND(0.93)   ND(0.93)   ND(0.93)				<u> </u>
A-Methylphenol   0.043				
Acenaphthene				
Acenaphthylene   0.21 J   0.16 J   0.12 J   Anthracene   0.77 J   0.28 J   0.25 J   0.26 J   0.27 J   0.26 J   0.26 J   0.27 J		0.19 J		
Benzo(a)privacene   3.9   2.2   2.0	Acenaphthylene	0.21 J	0.16 J	0.12 J
Benzolg juyrene	Anthracene			
Benzo(phuoranthene   2.5 J   2.4 J   3.1 J   2.6 J				
Benzo(gh.j)perylene   2.5 J   3.2 J   2.6 J				
Benzok   Horarathene   3,2 J   2,4 J   2,3 J				
Benzy Alcohol   ND(0,91)				
Chrysene				
Dibenzo(a.h)anthracene				4
Dibenzofuran   0.15				
Fluoranthene   5.7 J   3.3 J   4.0 J				
Fluorene   0.28 J   0.082 J   0.11 J	Fluoranthene			
Indeno(1,2,3-cd)pyrene	Fluorene			
Naphthalene         0.52 J         0.28 J         0.38 J           Phenanthrene         2.7 J         1.3 J         1.5 J           Phenol         ND(0.91)         ND(0.93)         ND(0.93)           Pyrene         6.8 J         3.8 J         5.9 J           Organochorine Pesticides         None Detected              None Detected         NA         NA         NA         NA           Herbicides         None Detected               None Detected                 Furans         Security         None Detected	Indeno(1,2,3-cd)pyrene		3.1 J	
Phenol ND(0.91) ND(0.93) ND(0.93) Pyrene 6.8 J 3.8 J 5.9 J Organochlorine Pesticides None Detected Organophosphate Pesticides None Detected NA NA NA NA Herbicides None Detected NA NA NA NA NA NA Herbicides None Detected NA NA NA NA Herbicides None Detected NA NA NA NA NA NA Herbicides None Detected NA N	Naphthalene		0.28 J	
Pyrene         6.8 J         3.8 J         5.9 J           Organochlorine Pesticides         None Detected         -         -         -           None Detected         NA         NA         NA         NA           Herbicides         None Detected         -         -         -         -           Furans         -	Phenanthrene			
Organochlorine Pesticides         - </td <td>Phenol</td> <td></td> <td></td> <td>ND(0.93)</td>	Phenol			ND(0.93)
None Detected	Pyrene	6.8 J	3.8 J	5.9 J
Organophosphate Pesticides         NA         NA         NA           None Detected         Herbicides         —         —         —           Furans         —         —         —         —           Furans         —         —         —         —           TCDFs (total)         0.00066         0.00047 J         0.0017 J           1.2,3,7,8-PeCDF         0.00068         0.00011         0.00026           2,3,4,7,8-PeCDF         0.000086         0.00013         0.00023           PeCDFs (total)         0.014         0.00081 J         0.00022 J           1,2,3,4,7,8-HxCDF         0.00020         0.000018         0.000055           1,2,3,6,7,8-HxCDF         0.000065         0.000031         0.000034           1,2,3,7,8,9-HxCDF         0.000031         0.000037         0.000010           1,2,3,4,7,8-HxCDF         0.000031         0.000037         0.000010           1,2,3,4,7,8,9-HxCDF         0.000031         0.000037         0.000010           1,2,3,4,6,7,8-HxCDF         0.000095         0.0000076         0.000030           HxCDFs (total)         0.011         0.00074         0.0012 J           1,2,3,4,7,8-HyCDF         0.00012         0.00041 J         0.00023				
None Detected				
None Detected				
None Detected		NA J	NA NA	NA NA
Furans 2,3,7,8-TCDF				
2,3,7,8-TCDF         0.000066         0.000096         0.000032           TCDFs (total)         0.0064         0.00047 J         0.0017 J           1,2,3,7,8-PeCDF         0.000088         0.000011         0.000026           2,3,4,7,8-PeCDF         0.000086         0.000013         0.000038           PeCDFs (total)         0.014         0.00081 J         0.0022 J           1,2,3,4,7,8-HxCDF         0.00020         0.000018         0.000055           1,2,3,7,8-HxCDF         0.000065         0.0000037         0.000034           1,2,3,7,8-HxCDF         0.000031         0.000037         0.000034           1,2,3,7,8-HxCDF         0.000031         0.000037         0.000030           1,2,3,7,8-HxCDF         0.000095         0.0000076         0.000030           1,2,3,4,6,7,8-HxCDF         0.00012         0.000074         0.00032 J           1,2,3,4,6,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8-HpCDF         0.000099         0.000082         0.000023           HpCDFs (total)         0.00072         0.000062         0.00020           Dioxins           2,3,7,8-TCDD				
TCDFs (total)				
1,2,3,7,8-PeCDF				· · · · · · · · · · · · · · · · · · ·
2,3,4,7,8-PeCDF         0.000086         0.000013         0.000038           PeCDFs (total)         0.014         0.00081 J         0.0022 J           1,2,3,4,7,8-HxCDF         0.00020         0.000018         0.000055           1,2,3,6,7,8-HxCDF         0.000065         0.0000069         0.00034           1,2,3,7,8,9-HxCDF         0.000031         0.000037         0.000010           2,3,4,6,7,8-HxCDF         0.000095         0.0000076         0.000030           HxCDFs (total)         0.011         0.00087 J         0.0012 J           1,2,3,4,6,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8,9-HpCDF         0.00012         0.00014 J         0.00032 J           HpCDFs (total)         0.0017         0.00023 J         0.00061 J           OCDF         0.00072         0.00062 D         0.00020           Dioxins         0.00025         0.000074 D         0.000014 D           2,3,7,8-PCDD         0.000023 D         0.0000074 D         0.000014 D           1,2,3,7,8-PcDD         0.000021 D         0.000019 D         0.000004 D           PeCDDs (total)         0.000024 D         0.000019 D         0.000004 D           1,2,3,4,7,8-HxCDD D         0.000024 D         0				
PeCDFs (total) 0.014 0.00081 J 0.0022 J 1,2,3,4,7,8-HxCDF 0.00020 0.000018 0.000055 1,2,3,6,7,8-HxCDF 0.000065 0.000069 0.00034 1,2,3,7,8,9-HxCDF 0.000031 0.000037 0.000010 2,3,4,6,7,8-HxCDF 0.000095 0.0000076 0.000030 HxCDFs (total) 0.011 0.00087 J 0.0012 J 1,2,3,4,6,7,8-HpCDF 0.0012 0.00014 J 0.00032 J 1,2,3,4,7,8,9-HpCDF 0.00099 0.000082 0.000023 HpCDFs (total) 0.0017 0.00023 J 0.00061 J 0CDF 0.00072 0.000062 0.00020 Dioxins 2,3,7,8-TCDD 0.000023 0.0000074 0.000014 TCDDs (total) 0.000088 0.0000074 0.000019 1,2,3,7,8-PCDD 0.000021 0.000018 J 0.000019 1,2,3,4,7,8-HxCDD 0.00024 0.000019 0.0000020 PeCDs (total) 0.00024 0.000019 0.0000030 1,2,3,4,7,8-HxCDD 0.000026 0.000023 0.0000019 1.2,3,4,7,8-HxCDD 0.000026 0.000020 HxCDDs (total) 0.000024 0.000019 0.0000030 1,2,3,4,7,8-HxCDD 0.000026 0.0000023 0.0000008 HxCDDs (total) 0.000042 0.0000028 0.0000080 HxCDDs (total) 0.000030 0.0000028 0.0000080 HxCDDs (total) 0.000031 0.000038 0.0000028 0.0000080 HxCDDs (total) 0.000031 0.000038 0.0000028 0.0000080 HxCDDs (total) 0.000031 0.000038 0.000028 0.0000080 HxCDDs (total) 0.000031 0.000038 0.0000080 HxCDDs (total) 0.000031 0.000038 0.0000038 0.000012 0.000012 0.000031				
1,2,3,4,7,8-HxCDF				
1,2,3,6,7,8-HxCDF       0.000065       0.0000069       0.00034         1,2,3,7,8,9-HxCDF       0.000031       0.0000037       0.000010         2,3,4,6,7,8-HxCDF       0.000095       0.0000076       0.000030         HxCDFs (total)       0.011       0.00087 J       0.0012 J         1,2,3,4,6,7,8-HpCDF       0.0012       0.00014 J       0.00032 J         1,2,3,4,7,8,9-HpCDF       0.000099       0.000082       0.00023         HpCDFs (total)       0.0017       0.00023 J       0.00061 J         OCDF       0.00072       0.00062       0.00020         Dioxins         2,3,7,8-TCDD       0.000023       0.0000074       0.000014         TCDDs (total)       0.000023       0.0000074       0.000019         1,2,3,7,8-PeCDD       0.000021       0.000018 J       0.0000042         PeCDDs (total)       0.00024       0.000019       0.000030         1,2,3,4,7,8-HxCDD       0.000026       0.000023 J       0.0000065         1,2,3,6,8-HxCDD       0.000030       0.000028       0.000008         HxCDDs (total)       0.00033       0.000028       0.000014         HxCDDs (total)       0.00033       0.000038       0.00012         HyCDDs (total)				
1,2,3,7,8,9-HxCDF         0.000031         0.000037         0.000010           2,3,4,6,7,8-HxCDF         0.000095         0.0000076         0.000030           HxCDFs (total)         0.011         0.00087 J         0.0012 J           1,2,3,4,6,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8,9-HpCDF         0.000099         0.000082         0.000023           HpCDFs (total)         0.0017         0.00023 J         0.00061 J           OCDF         0.00072         0.00062         0.00020           Dioxins         0.000000         0.000004         0.000014           2,3,7,8-TCDD         0.000023         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDDs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.000023 J         0.0000065           1,2,3,6,7,8-HxCDD         0.000030         0.000028         0.0000080           HxCDDs (total)         0.00057         0.000054         0.00014           HxCDDs (total)         0.00033         0.000038         0.000012           HpCDDs (total)         0.00026         0.000026         0				
2,3,4,6,7,8-HxCDF         0.000095         0.0000076         0.000030           HxCDFs (total)         0.011         0.00087 J         0.0012 J           1,2,3,4,6,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8,9-HpCDF         0.000099         0.000082         0.000023           HpCDFs (total)         0.0017         0.00023 J         0.00061 J           OCDF         0.00072         0.000062         0.00020           Dioxins           2,3,7,8-TCDD         0.000023         0.0000074         0.000014           TCDDs (total)         0.000088         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDDs (total)         0.000024         0.000019         0.000030           1,2,3,7,8-HxCDD         0.000026         0.000023 J         0.0000065           1,2,3,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8-HxCDD         0.000030         0.000028         0.0000080           HxCDDs (total)         0.000057         0.000054         0.000014           1,2,3,4,6,7,8-HpCDD	1,2,3,7,8,9-HxCDF			
1,2,3,4,6,7,8-HpCDF         0.0012         0.00014 J         0.00032 J           1,2,3,4,7,8,9-HpCDF         0.000099         0.0000082         0.000023           HpCDFs (total)         0.0017         0.00023 J         0.00061 J           OCDF         0.00072         0.000062         0.00020           Dioxins           2,3,7,8-TCDD         0.000023         0.0000074         0.000014           TCDDs (total)         0.000088         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDbs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.000023 J         0.0000065           1,2,3,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8-HxCDD         0.000030         0.000028         0.0000080           HxCDbs (total)         0.00057         0.000054         0.00014           HxCDbs (total)         0.00033         0.000038         0.00012           HpCDbs (total)         0.00026         0.000075         0.00024           OCDD         0.00026         0.000026         0.00026         0.00026	2,3,4,6,7,8-HxCDF			
1,2,3,4,7,8,9-HpCDF       0.000099       0.0000082       0.000023         HpCDFs (total)       0.0017       0.00023 J       0.00061 J         OCDF       0.00072       0.000062       0.00020         Dioxins         2,3,7,8-TCDD       0.000023       0.0000074       0.000014         TCDDs (total)       0.000088       0.0000074       0.000019         1,2,3,7,8-PeCDD       0.000021       0.0000018 J       0.0000042         PeCDDs (total)       0.00024       0.000019       0.000030         1,2,3,4,7,8-HxCDD       0.000026       0.000023 J       0.0000065         1,2,3,6,7,8-HxCDD       0.000042       0.000040       0.000011         1,2,3,7,8,9-HxCDD       0.000030       0.000028       0.000080         HxCDDs (total)       0.00057       0.00054       0.00014         1,2,3,4,6,7,8-HpCDD       0.00033       0.000038       0.00012         HpCDDs (total)       0.00026       0.00026       0.00026	HxCDFs (total)			
Description	1,2,3,4,6,7,8-HpCDF			0.00032 J
OCDF         0.00072         0.00062         0.00020           Dioxins         2,3,7,8-TCDD         0.000023         0.0000074         0.000014           TCDDs (total)         0.000088         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDDs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.000023 J         0.0000065           1,2,3,6,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8,9-HxCDD         0.000030         0.000028         0.000080           HxCDDs (total)         0.00057         0.000054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.00075         0.00024           OCDD         0.0020         0.00026         0.00026         0.00082				
Dioxins         0.000023         0.0000074         0.0000014           TCDDs (total)         0.000088         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDDs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.000023 J         0.000065           1,2,3,6,7,8-HxCDD         0.000042         0.000040         0.000011           1,2,3,7,8,9-HxCDD         0.000030         0.000028         0.0000080           HxCDDs (total)         0.00057         0.000054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.000075         0.00024           OCDD         0.0020         0.00026         0.00026         0.00026	HpCDFs (total)			
2,3,7,8-TCDD       0.0000023       0.00000074       0.0000014         TCDDs (total)       0.000088       0.0000074       0.000019         1,2,3,7,8-PeCDD       0.000021       0.0000018 J       0.0000042         PeCDDs (total)       0.00024       0.000019       0.000030         1,2,3,4,7,8-HxCDD       0.000026       0.000023 J       0.000065         1,2,3,6,7,8-HxCDD       0.000042       0.0000040       0.000011         1,2,3,7,8,9-HxCDD       0.000030       0.000028       0.000080         HxCDDs (total)       0.00057       0.00054       0.00014         1,2,3,4,6,7,8-HpCDD       0.00033       0.000038       0.00012         HpCDDs (total)       0.00065       0.000075       0.00024         OCDD       0.0020       0.00026       0.00026       0.00082		0.00072	0.000062	0.00020
TCDDs (total)         0.000088         0.0000074         0.000019           1,2,3,7,8-PeCDD         0.000021         0.000018 J         0.0000042           PeCDDs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.000023 J         0.000065           1,2,3,6,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8,9-HxCDD         0.000030         0.000028         0.000080           HxCDDs (total)         0.00057         0.000054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.000075         0.00024           OCDD         0.0020         0.00026         0.00026				
1,2,3,7,8-PeCDD       0.000021       0.0000018 J       0.0000042         PeCDDs (total)       0.00024       0.000019       0.000030         1,2,3,4,7,8-HxCDD       0.000026       0.000023 J       0.000065         1,2,3,6,7,8-HxCDD       0.000042       0.0000040       0.000011         1,2,3,7,8,9-HxCDD       0.000030       0.000028       0.000080         HxCDDs (total)       0.00057       0.00054       0.00014         1,2,3,4,6,7,8-HpCDD       0.00033       0.000038       0.00012         HpCDDs (total)       0.00065       0.000075       0.00024         OCDD       0.0020       0.00026       0.00026       0.00082				
PecDDs (total)         0.00024         0.000019         0.000030           1,2,3,4,7,8-HxCDD         0.000026         0.0000023 J         0.0000065           1,2,3,6,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8,9-HxCDD         0.000030         0.000028         0.0000080           HxCDDs (total)         0.00057         0.00054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.000075         0.00024           OCDD         0.0020         0.00026         0.00082				
1,2,3,4,7,8-HxCDD         0.000026         0.0000023 J         0.0000065           1,2,3,6,7,8-HxCDD         0.000042         0.0000040         0.000011           1,2,3,7,8,9-HxCDD         0.000030         0.0000028         0.0000080           HxCDDs (total)         0.00057         0.000054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.00075         0.00024           OCDD         0.0020         0.00026         0.00082	, , , , , , , , , , , , , , , , , , , ,			
1,2,3,6,7,8-HxCDD       0.000042       0.0000040       0.000011         1,2,3,7,8,9-HxCDD       0.000030       0.000028       0.000080         HxCDDs (total)       0.00057       0.00054       0.00014         1,2,3,4,6,7,8-HpCDD       0.00033       0.000038       0.00012         HpCDDs (total)       0.00065       0.00075       0.00024         OCDD       0.0020       0.00026       0.00082				
1,2,3,7,8,9-HxCDD       0.000030       0.000028       0.000080         HxCDDs (total)       0.00057       0.00054       0.00014         1,2,3,4,6,7,8-HpCDD       0.00033       0.00038       0.00012         HpCDDs (total)       0.00065       0.00075       0.00024         OCDD       0.0020       0.00026       0.00082				
HxCDDs (total)         0.00057         0.000054         0.00014           1,2,3,4,6,7,8-HpCDD         0.00033         0.000038         0.00012           HpCDDs (total)         0.00065         0.000075         0.00024           OCDD         0.0020         0.00026         0.00082				
1,2,3,4,6,7,8-HpCDD     0.00033     0.00038     0.00012       HpCDDs (total)     0.00065     0.00075     0.00024       OCDD     0.0020     0.00026     0.00082				
HpCDDs (total)         0.00065         0.000075         0.00024           OCDD         0.0020         0.00026         0.00082				
OCDD 0.0020 0.00026 0.00082	HpCDDs (total)			
	Total TEQs (WHO TEFs)			

Sample Depth(Feet):	F0218802 H2-F0218802-0-0000 0-0.5 11/10/98	F0219004 H2-F0219004-0-0000 0-0.5 11/11/98	F0219006 H2-F0219006-0-0000 0-0.5 11/11/98
Inorganics			
Antimony	0.770 J	0.900 J	1.00 J
Arsenic	4.10	29.0	45.4
Barium	40.2	72.2	67.6
Beryllium	0.180 J	0.350 J	0.120 J
Cadmium	0.160 J	ND(0.0300)	ND(0.0300)
Chromium	17.6	15.5	22.9
Cobalt	7.60	10.6	13.7
Copper	42.3 J	53.4 J	60.4 J
Lead	81.9 J	163 J	231 J
Mercury	0.170	0.590	0.770
Nickel	37.2	19.7	25.0
Selenium	0.530 J	1.60	0.900
Silver	ND(0.130)	0.480 J	0.750 J
Thallium	ND(0.560)	ND(0.510)	0.950 J
Tin	7.60	7.00	8.50
Vanadium	12.1	21.9	22.8
Zinc	161 J	164 J	179 J

Location ID: Sample ID: Sample Depth(Feet):	F0219203 H2-F0219203-0-0000 0-0.5	F0219407 H2-F0219407-0-0010 1-1.5	F0220201 H2-F0220201-0-0000 0-0.5
Parameter Date Collected:	11/12/98	11/12/98	11/13/98
Semivolatile Organics			
1,2,4-Trichlorobenzene	ND(0.41)	0.028 J	ND(0.40)
1,4-Dichlorobenzene	ND(0.41)	0.046 J	ND(0.40)
2-Methylnaphthalene	0.022 J	0.066 J	ND(0.40) J
2-Methylphenol	R	R	ND(0.40)
4-Methylphenol	R	R	ND(0.40)
Acenaphthene	ND(0.41)	0.034 J	ND(0.40)
Acenaphthylene	0.056 J	0.088 J	ND(0.40)
Anthracene	0.071 J	0.11 J	ND(0.40)
Benzo(a)anthracene	1.4	0.67	0.039 J
Benzo(a)pyrene	1.5	0.82	0.051 J
Benzo(b)fluoranthene	1.2	0.52	0.050 J
Benzo(g,h,i)perylene	1.2 J	0.64 J	0.049 J
Benzo(k)fluoranthene	1.4	0.75	0.056 J
Benzyi Alcohol	0.082 J	R	ND(0.40) J
Chrysene	1.5	0.77	0.062 J
Dibenzo(a,h)anthracene	0.40 J	0.20 J	ND(0.40) J
Dibenzofuran	ND(0.41)	0.027 J	ND(0.40)
Fluoranthene	2.2	0.85	0.076 J
Fluorene	0.019 J	0.039 J	ND(0.40)
Indeno(1,2,3-cd)pyrene	1.2 J	0.56 J	0.046 J
Naphthalene	0.038 J	0.14 J	ND(0.40)
Phenanthrene	0.38 J	0.43	0.047 J
Phenol	R	R	ND(0.40)
Pyrene	3.1 J	0.95 J	0.084 J
Organochlorine Pesticides			
None Detected	~~		
Organophosphate Pesticides		!	**************************************
None Detected	NA NA	NA I	
Herbicides			
None Detected			
Furans			
	0.0000045	0.000047	0.000004
2,3,7,8-TCDF	0.000045 0.000054 J	0.000017	0.000021
TCDFs (total)	0.000054 3	0.00043 J	0.00017 J
1,2,3,7,8-PeCDF	0.0000025	0.0000082	0.0000049
2,3,4,7,8-PeCDF		0.000016	0.0000067
PeCDFs (total)	0.000082 J 0.0000048	0.0012 J	0.000084 J
1,2,3,4,7,8-HxCDF		0.000026	0.0000041
1,2,3,6,7,8-HxCDF	0.0000022 J	0.0000078	0.0000042
1,2,3,7,8,9-HxCDF	0.00000089 J	0.0000044	0.00000064 J
2,3,4,6,7,8-HxCDF	0.0000028	0.000012	0.0000027
HxCDFs (total)	0.00010 J	0.00065 J	0.000047 J
1,2,3,4,6,7,8-HpCDF	0.000032 J	0.00011 J	0.000018 J
1,2,3,4,7,8,9-HpCDF	0.0000020 J	0.000013	0.0000011 J
HpCDFs (total)		0.0000= :	
0005	0.000058 J	0.00025 J	0.000034 J
OCDF		0.00025 J 0.000085	0.000034 J 0.000020
Dioxins	0.000058 J 0.000019	0.000085	0.000020
Dioxins 2,3,7,8-TCDD	0.000058 J 0.000019 0.00000036 J	0.000085	0.000020 ND(0.00000034)
Dioxins 2,3,7,8-TCDD TCDDs (total)	0.000058 J 0.000019 0.00000036 J 0.0000014	0.000085 0.000065 0.000014	0.000020 ND(0.00000034) 0.0000037
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD	0.000058 J 0.000019 0.00000036 J 0.0000014 0.00000041 J	0.000085 0.0000065 0.000014 0.0000024 J	0.000020 ND(0.00000034) 0.0000037 0.00000041 J
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total)	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000023 J	0.000085 0.0000065 0.000014 0.000024 J 0.000024	0.000020 ND(0.00000034) 0.0000037 0.00000041 J 0.0000047
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000023 J 0.0000060 J	0.000085 0.0000065 0.000014 0.0000024 J 0.000024 0.0000028	0.000020 ND(0.0000034) 0.0000037 0.0000041 J 0.0000047 0.00000055 J
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD	0.000058 J 0.000019 0.00000036 J 0.0000014 0.00000041 J 0.0000023 J 0.0000060 J 0.0000011 J	0.000085 0.0000065 0.000014 0.0000024 J 0.000024 0.0000028 0.0000042	0.000020 ND(0.00000034) 0.0000037 0.00000041 J 0.0000047
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000023 J 0.0000060 J 0.0000011 J 0.00000087 J	0.000085 0.0000065 0.000014 0.0000024 J 0.000024 0.0000028 0.0000042 0.0000028	0.000020 ND(0.0000034) 0.0000037 0.0000041 J 0.0000047 0.00000055 J
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDD	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000060 J 0.0000011 J 0.0000087 J 0.000011	0.000085  0.000065 0.000014 0.000024 J 0.000024 0.000028 0.0000042 0.0000028 0.0000053	0.000020 ND(0.00000034) 0.0000037 0.00000041 J 0.0000047 0.00000055 J 0.00000094 J
Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD HxCDDs (total)	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000023 J 0.0000060 J 0.0000011 J 0.00000087 J	0.000085 0.0000065 0.000014 0.0000024 J 0.000024 0.0000028 0.0000042 0.0000028	0.000020 ND(0.0000034) 0.0000037 0.00000041 J 0.0000047 0.00000055 J 0.00000094 J 0.00000066 J
OCDF  Dioxins 2,3,7,8-TCDD TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD HxCDDs (total) 1,2,3,4,6,7,8-HpCDD HyCDDs (total) HyCDDs (total) HyCDDs (total)	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000060 J 0.0000011 J 0.0000087 J 0.000011	0.000085  0.000065 0.000014 0.000024 J 0.000024 0.000028 0.0000042 0.0000028 0.0000053	0.000020  ND(0.0000034) 0.0000037 0.0000041 J 0.0000047 0.00000055 J 0.00000094 J 0.00000066 J 0.0000094
Dioxins  2,3,7,8-TCDD  TCDDs (total)  1,2,3,7,8-PeCDD  PeCDDs (total)  1,2,3,4,7,8-HxCDD  1,2,3,6,7,8-HxCDD  1,2,3,7,8,9-HxCDD  HxCDDs (total)  1,2,3,4,6,7,8-HpCDD	0.000058 J 0.000019 0.0000036 J 0.0000014 0.0000041 J 0.0000060 J 0.0000011 J 0.0000087 J 0.000011 0.000015	0.000085  0.000065 0.000014 0.000024 J 0.000028 0.0000042 0.0000028 0.0000053 0.000039	0.000020  ND(0.0000034) 0.0000037 0.0000041 J 0.0000047 0.00000055 J 0.00000094 J 0.00000066 J 0.0000094 0.000012

Location ID: Sample ID: Sample Depth(Feet): Parameter Date Collected:	F0219203 H2-F0219203-0-0000 0-0.5 11/12/98	F0219407 H2-F0219407-0-0010 1-1.5 11/12/98	F0220201 H2-F0220201-0-0000 0-0.5 11/13/98
Inorganics			
Antimony	ND(0.670)	ND(0.760)	ND(0.740)
Arsenic	35.6	2.60	8.40
Barium	26.2	36.9	47.2
Beryllium	ND(0.0700)	0.160 J	ND(0.0100)
Cadmium	1.00	0.650	0.810
Chromium	11.2	9.70	7.30
Cobalt	11.5	7.40	13.3
Copper	20.4	21.1	25.3
Lead	101	27.6	28.8
Mercury	0.100	0.0700	0.0700
Nickel	17.5	10.9	17.2
Selenium	0.860	0.480 J	0.960
Silver	0.150 J	ND(0.120)	ND(0.110)
Thallium	ND(0.450)	0.570 J	ND(0.490)
Tin	1.10 J	2.90	0.700 J
Vanadium	12.7	9.70	10.2
Zinc	79.4	65.6	54.3

Location ID: Sample ID:	F0220603 H2-F0220603-0-0000	F0321001 H2-F0321001-0-0010	RB022041 H2-RB022041-0-0010
Sample ID:	0-0.5	1-1.5	1-1.5
Parameter Date Collected:	0-0.5 11/13/98	11/16/98	10/22/98
Semivolatile Organics	11/19/90		IUIZZI 30
1.2.4-Trichlorobenzene	0.025 J	0.085 J	ND(0.38) J
1,2,4-Thchlorobenzene 1,4-Dichlorobenzene	0.023 J	0.083 J 0.087 J	ND(0.38)
2-Methylnaphthalene	0.020 J	0.007 3 0.40 J	ND(0.38)
2-Methylhaphthalerie 2-Methylphenol	R	0.046 J	ND(0.38)
4-Methylphenol	R	0.12 J	R
Acenaphthene	0.018 J	0.15 J	ND(0.38)
Acenaphthylene	0.037 J	0.85 J	ND(0.38) J
Anthracene	0.064 J	0.58 J	ND(0.38) J
Benzo(a)anthracene	0.61	2.9	0.064 J
Benzo(a)pyrene	0.72	3.6 J	0.053 J
Benzo(b)fluoranthene	0.60	3.2	0.050 J
Benzo(g,h,i)perylene	0.52 J	3.0	0.045 J
Benzo(k)fluoranthene	0.62	3.3	0.064 J
Benzyl Alcohol	R	ND(0.81)	ND(0.38) J
Chrysene	0.68	3.5	0.068 J
Dibenzo(a,h)anthracene	0.15 J	0.71 J	0.023 J
Dibenzofuran	0.021 J	0.14 J	ND(0.38)
Fluoranthene	0.87	4.4	0.10 J
Fluorene	0.022 J	0.18 J	ND(0.38)
ndeno(1,2,3-cd)pyrene	0.50 J	2.1	0.041 J
Naphthalene	0.11 J	0.67 J	ND(0.38)
Phenanthrene	0.32 J	2.3	0.059 J
Phenol	R 0.95 J	0.28 J	ND(0.38)
Pyrene	0.93 3	5.0	0.12 J
Organochlorine Pesticides		1	
None Detected			
Organophosphate Pesticides		T	
None Detected	NA NA	<u></u>	
Herbicides			
None Detected			
Furans	0.000044	T 0.00040	
2,3,7,8-TCDF	0.000014	0.00018	0.0000093
TCDFs (total)	0.00034 J	0.0039 J	0.000076 J
1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF	0.0000080 0.000013	0.00021 0.00029	0.0000055
PeCDFs (total)	0.000013 0.00055 J	0.00029 0.0074 J	0.000093 0.00011 J
1,2,3,4,7,8-HxCDF	0.000035	0.00743	0.000113
1,2,3,4,7,8-1XCDF	0.000026	0.00032 0.00027 J	0.000011
1,2,3,7,8,9-HxCDF	0.000047	0.00012	0.0000043
2,3,4,6,7,8-HxCDF	0.000011	0.0001Z	0.0000025 0.0000035 J
HxCDFs (total)	0.00055 J	0.0053 J	0.00010 J
1.2.3.4.6.7.8-HpCDF	0.00017 J	0.0025 J	0.000086 J
1,2,3,4,7,8,9-HpCDF	0.000012	0.00019	0.000050
HpCDFs (total)	0.00040 J	0.0045 J	0.00016 J
OCDF	0.00023	0.0015	0.000066
Dioxins			
2,3,7,8-TCDD	0.000016	0.0000049	0.0000061
TCDDs (total)	0.000026	0.000083	0.0000021
1,2,3,7,8-PeCDD	0.0000024 J	0.000021 J	0.00000038 J
PeCDDs (total)	0.000022	0.00023 J	0.0000041 J
1,2,3,4,7,8-HxCDD	0.000034	0.000024	0.00000055 J
1,2,3,6,7,8-HxCDD	0.000074	0.000055	0.0000011
1,2,3,7,8,9-HxCDD	0.0000042	0.000027	0.0000054 J
HxCDDs (total)	0.000078	0.00060	0.000010
1,2,3,4,6,7,8-HpCDD	0.000096	0.00059	0.000020
HpCDDs (total)	0.00016	0.0011	0.000035
OCDD	0.00063	0.0046	0.00017
Total TEQs (WHO TEFs)	0.000049	0.00035	0.000010

Location ID: Sample ID: Sample Depth(Feet): Parameter Date Collected:	F0220603 H2-F0220603-0-0000 0-0.5 11/13/98	F0321001 H2-F0321001-0-0010 1-1.5 11/16/98	RB022041 H2-RB022041-0-0010 1-1.5 10/22/98
Inorganics			
Antimony	ND(0.680)	2.10	ND(0.610)
Arsenic	6.20	7.90	6.10
Barium	30.5	76.5	26.7
Beryllium	ND(0.0500)	0.390	0.170
Cadmium	0.960	ND(1.20)	ND(0.0300)
Chromium	10.0	114	11.1
Cobalt	9.50	10.3	10.2
Copper	25.9	188	17.3
Lead	49.8	329	14.6
Mercury	0.120	0.890	0.0600
Nickel	16.6	21.4 J	15.3
Selenium	0.680	ND(0.590)	0.370 J
Silver	0.140 J	ND(0.680)	ND(0.120)
Thallium	ND(0.450)	ND(0.670)	ND(0.520)
Tin	2.20	27.2	ND(1.40)
Vanadium	12.4	15.3	13.1
Zinc	76.5	314	57.7

Sample Depth(Feet): Parameter Date Collected:	RB032121 H2-RB032121-0-0000 0-0.5 10/19/98
Semivolatile Organics	
1,2,4-Trichlorobenzene	0.056 J
1,4-Dichlorobenzene	0.097 J
2-Methylnaphthalene	0.16 J
2-Methylphenol	ND(0.80)
4-Methylphenol	ND(0.80)
Acenaphthene	0.24 J
Acenaphthylene	0.11 J
Anthracene	0.99
Benzo(a)anthracene	2.3
Benzo(a)pyrene	1.8
Benzo(b)fluoranthene	1.5
Benzo(g,h,i)perylene	0.83
Benzo(k)fluoranthene	1.7
Benzyl Alcohol	ND(0.80) J
Chrysene	2.0
Dibenzo(a,h)anthracene	0.32 J
Dibenzofuran	0.19 J
Fluoranthene	4.2 J
Fluorene	0.50 J
Indeno(1,2,3-cd)pyrene	0.90
Naphthalene	0.35 J
Phenanthrene	3.3
Phenol	ND(0.80)
Pyrene	4.0
Organochlorine Pesticides	
None Detected	
Organophosphate Pesticides	
None Detected	NA
Herbicides	
None Detected	**
Furans	
2,3,7,8-TCDF	0.000016
TCDFs (total)	0.00019 J
1,2,3,7,8-PeCDF	0.000084
2,3,4,7,8-PeCDF	0.000016
PeCDFs (total)	0.00029 J
1,2,3,4,7,8-HxCDF	0.000021
1,2,3,6,7,8-HxCDF	0.000075
1,2,3,7,8,9-HxCDF	0.000033
2,3,4,6,7,8-HxCDF	0.0000044
HxCDFs (total)	0.00023
1,2,3,4,6,7,8-HpCDF	0.00012
1,2,3,4,7,8,9-HpCDF	0.000096
HpCDFs (total)	0.00023
OCDF	0.00012
Dioxins	0.00072
2,3,7,8-TCDD	0.00000047 J
	0.00000047 3
	0.000060
TCDDs (total)	0.0000060
TCDDs (total) 1,2,3,7,8-PeCDD	0.00000088 J
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total)	0.0000088 J 0.0000071 J
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD	0.00000088 J 0.0000071 J 0.0000011 J
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD	0.0000088 J 0.0000071 J 0.0000011 J 0.0000039
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD	0.00000088 J 0.0000071 J 0.0000011 J 0.0000039 0.0000017
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD HxCDDs (total)	0.00000088 J 0.0000071 J 0.0000011 J 0.0000039 0.0000017 0.000031
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD HxCDDs (total) 1,2,3,4,6,7,8-HpCDD	0.00000088 J 0.0000071 J 0.0000011 J 0.0000039 0.0000017 0.000031 0.000077
TCDDs (total) 1,2,3,7,8-PeCDD PeCDDs (total) 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD HxCDDs (total)	0.00000088 J 0.0000071 J 0.0000011 J 0.0000039 0.0000017 0.000031

PROPOSAL FOR NON-PCB PRE-DESIGN INVESTIGATIONS - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1-1/2 MILE REACH GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

(Results are presented in dry weight parts per million, ppm)

Location ID: Sample ID: Sample Depth(Feet): Parameter Date Collected:	RB032121 H2-RB032121-0-0000 0-0.5 10/19/98			
Inorganics				
Antimony	0.660			
Arsenic	2.90			
Barium	34.2			
Beryllium	0.250			
Cadmium	ND(0.170)			
Chromium	13.6			
Cobalt	6.30			
Copper	22.2			
Lead	31.7			
Mercury	0.0800			
Nickel	11.8			
Selenium	ND(0.210)			
Silver	ND(0.510)			
Thallium	ND(0.740)			
Tin	ND(1.50)			
Vanadium	10.2			
Zinc	72.3			

### Notes:

- Sample collection and analysis performed by United States Environmental Protection Agency (EPA) Subcontractors. Results provided to GE
  under a Data Exchange Agreement between GE and EPA.
- 2. ND Analyte was not detected. The number in parentheses is the associated detection limit.
- 3. With the exception of dioxin/furans, only those constituents detected in at least one sample are summarized.
- 4. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.

### Data Qualifiers:

Organics (semivolatiles, pesticides, herbicides, dioxin/furans)

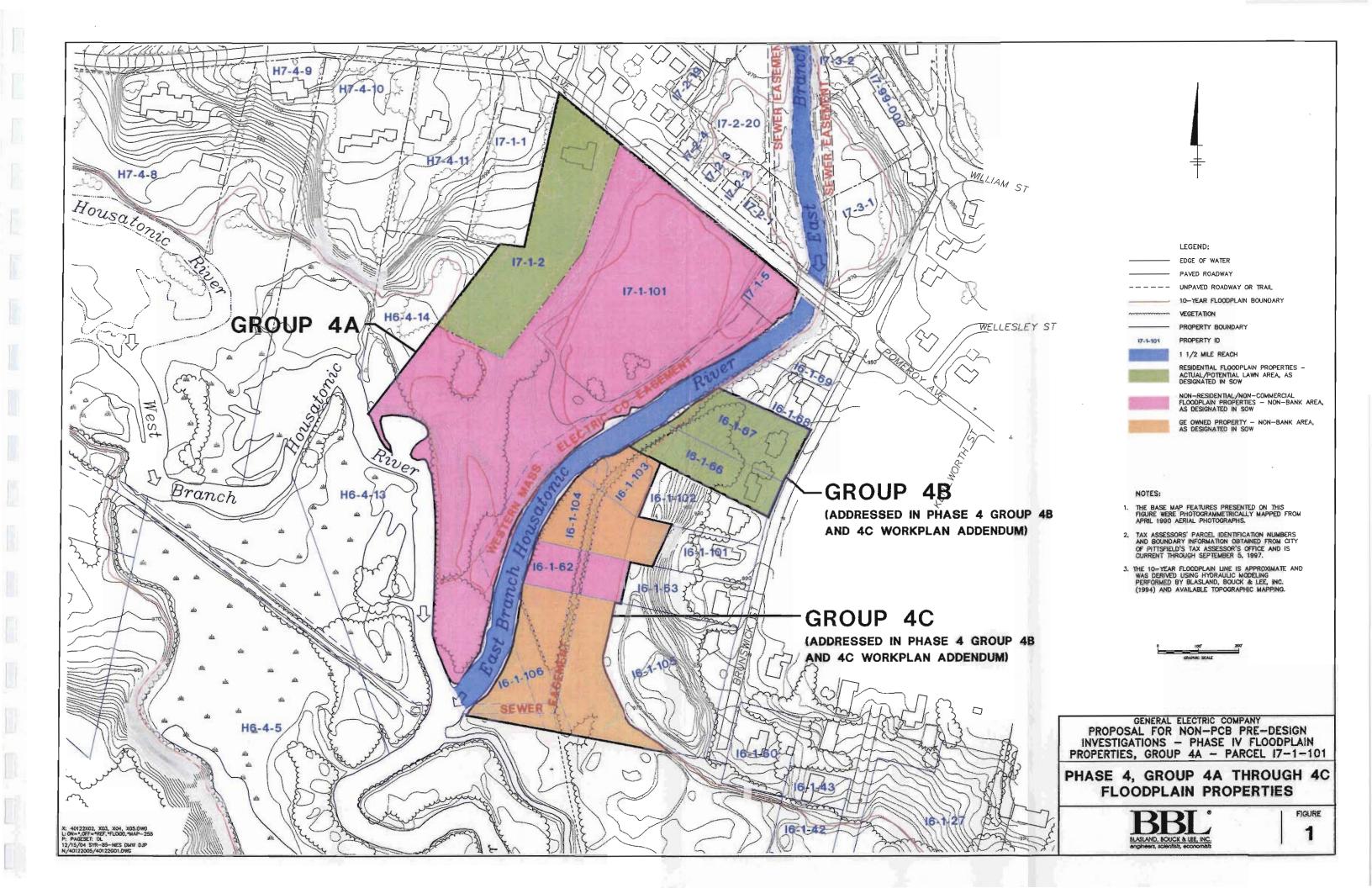
- J Estimated Value.
- R Rejected.

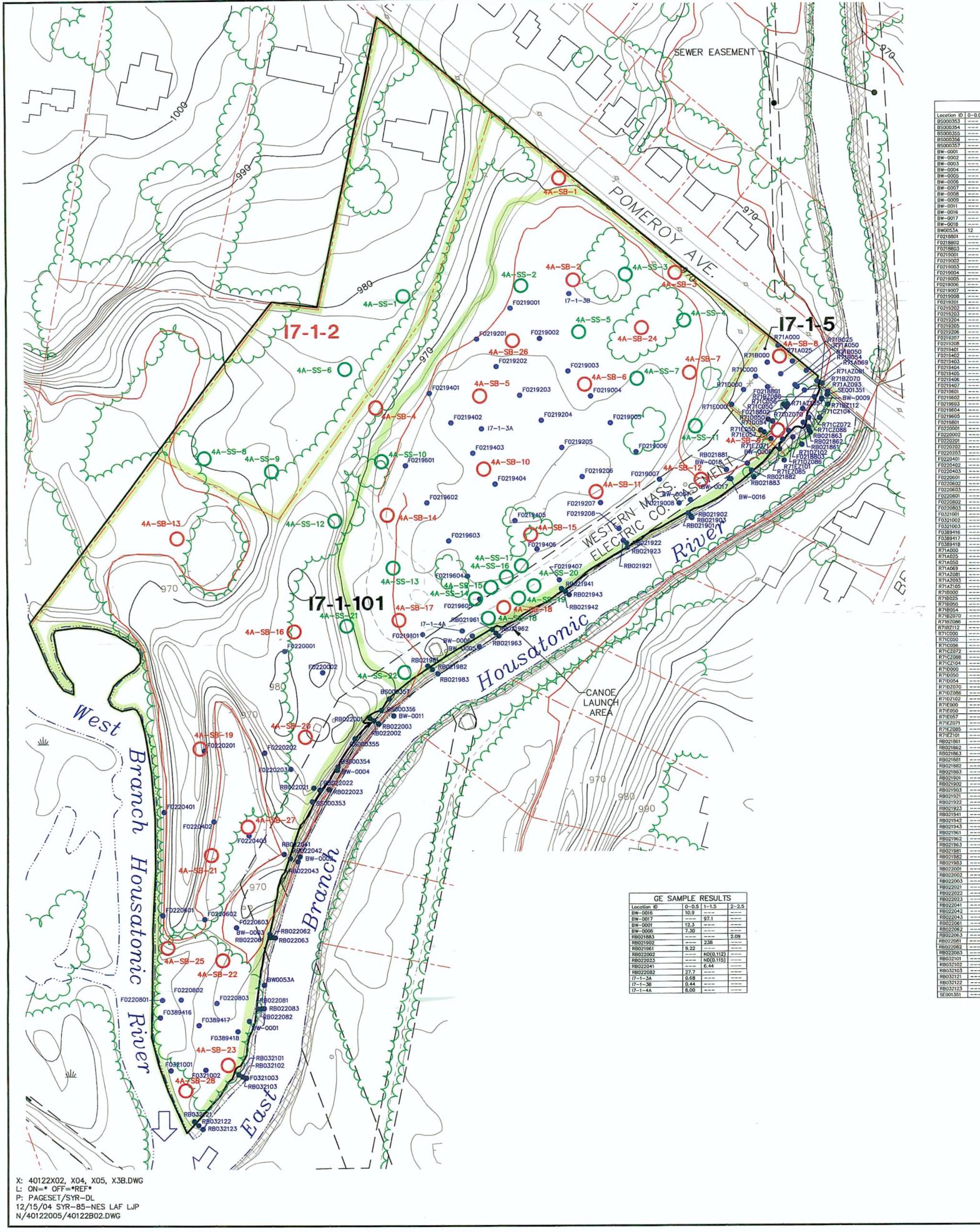
### Inorganics

J - Estimated Value.

# **Figures**

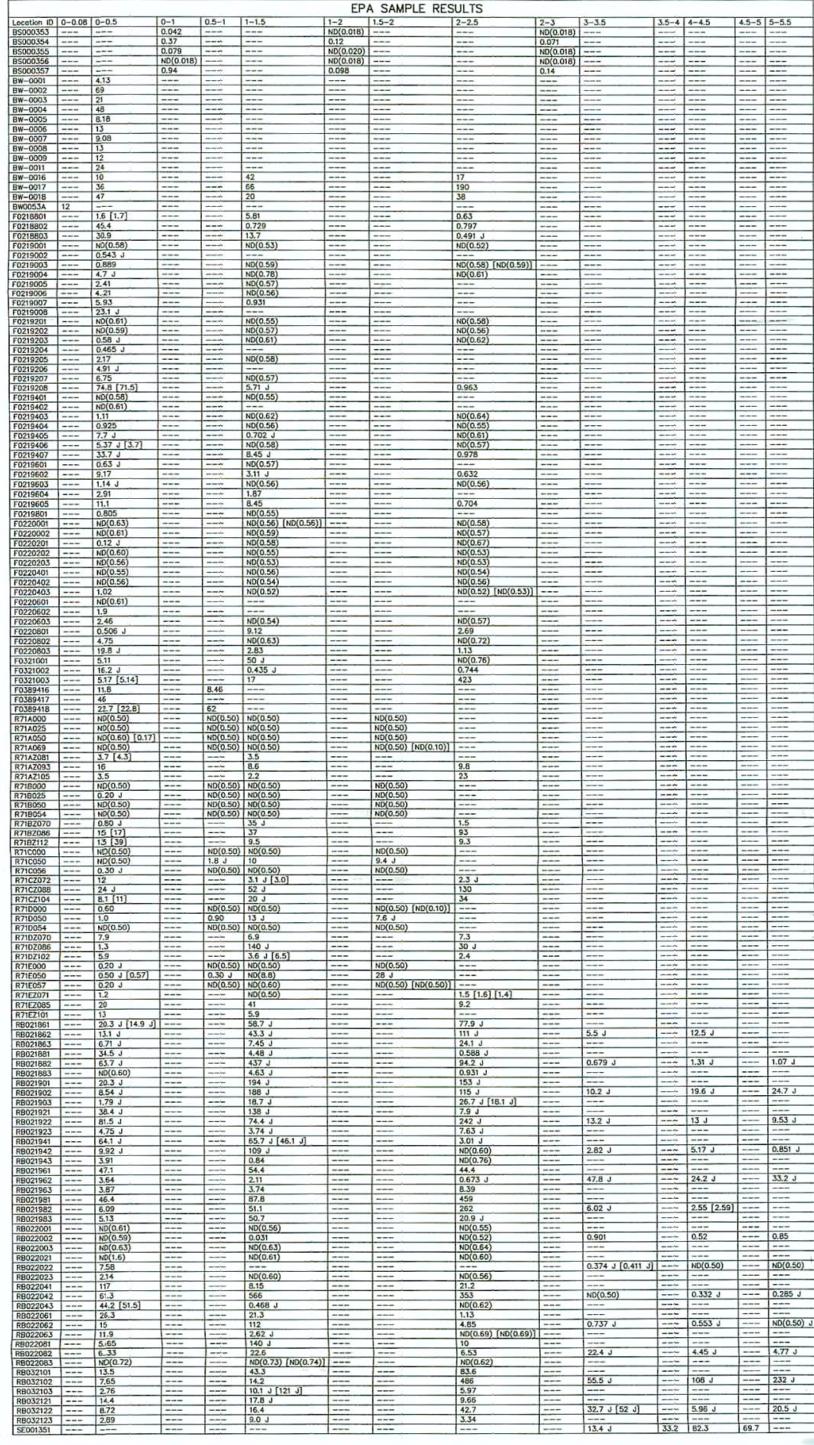


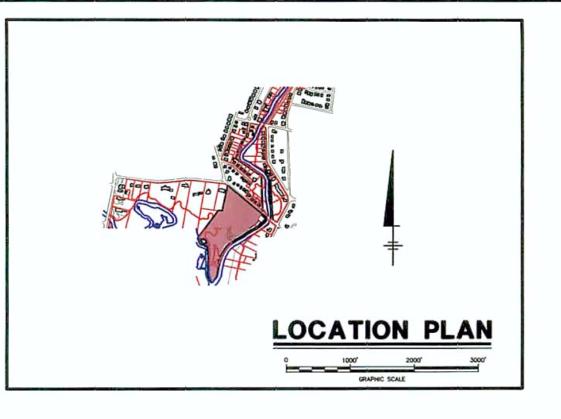




### SUMMARY OF EXISTING PCB SOIL SAMPLE RESULTS

(RESULTS ARE PRESENT AS DRY WEIGHT PARTS PER MILLION, PPM)
(SAMPLE INCREMENTS IN FEET BELOW GROUND SURFACE)





# TOPOGRAPHIC CONTOUR APPROXIMATE PARCEL BOUNDARY 10—YEAR FLOODPLAIN BOUNDARY APPROXIMATE HORIZONTAL LIMITS OF AVERAGING AREA I7-1-2 RESIDENTIAL PROPERTY PARCEL ID NON—RESIDENTIAL PROPERTY PARCEL ID EXISTING SOIL BORING LOCATION PROPOSED SURFACE SOIL SAMPLE LOCATION AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL AREA BOUNDARY OF FLOODPLAIN PROPERTIES (SEE NOTE 4)

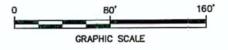
### FIGURE NOTES:

- THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM AERIAL PHOTOGRAPHS DATED APRIL 1990.
- PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10-YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- LIMIT OF EPA RESPONSE ACTIONS ASSOCIATED WITH THE 1 1/2 MILE REACH IS BASED ON ELECTRONIC FILE RECEIVED FROM EPA ON NOVEMBER 10, 2004.
- 5. SAMPLE LOCATIONS ARE APPROXIMATE.

# TABLE NOTES

A. SAMPLE DATA OBTAINED FROM EPA DATABASE TITLED 050704\_USEPA\_HR\_DBASE1.MDB (EPA) AND GE DATABASE TITLED HR052604.MDB.

- B. J = INDICATES ESTIMATED VALUE.
- C. --- = INDICATES SAMPLE INTERVAL WAS NOT SUBJECT TO PCB ANALYSIS.
- D. DUPLICATE RESULTS PRESENTED IN BRACKETS.
- E. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS PER MILLION, PPM.



GENERAL ELECTRIC COMPANY
PRE-DESIGN INVESTIGATION WORK PLAN
ADDENDUM FOR FLOODPLAIN PROPERTIES
ADJACENT TO THE 1-1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS FOR GROUP 4A







——970 — TOPOGRAPHIC CONTOUR

APPROXIMATE PARCEL BOUNDARY

10-YEAR FLOODPLAIN BOUNDARY

APPROXIMATE HORIZONTAL LIMITS OF AVERAGING AREA

17-1-2 RESIDENTIAL PROPERTY PARCEL ID
17-1-5 NON-RESIDENTIAL PROPERTY PARCEL ID

F0219203 EXISTING SOIL BORING LOCATION

PROPOSED APPENDIX IX+3 SURFACE SO

O 4A-SS-19 PROPOSED APPENDIX 1X+3 SURFACE SOIL SAMPLE LOCATION

PROPOSED APPENDIX IX+3 SOIL BORING LOCATION

AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL AREA

BOUNDARY OF FLOODPLAIN PROPERTIES (SEE NOTE 4)

### FIGURE NOTES:

- THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM AERIAL PHOTOGRAPHS DATED APRIL 1990.
- PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10-YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- LIMIT OF EPA RESPONSE ACTIONS ASSOCIATED WITH THE 1 1/2 MILE REACH IS BASED ON ELECTRONIC FILE RECEIVED FROM EPA ON NOVEMBER 10, 2004.
- 5. SAMPLE LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PROPOSAL FOR NON-PCB PRE-DESIGN
INVESTIGATIONS - PHASE IV FLOODPLAIN
PROPERTIES, GROUP 4A - PARCEL I7-1-101

SUMMARY OF EXISTING AND PROPOSED APPENDIX IX+3 SOIL SAMPLING LOCATIONS FOR GROUP 4A

BIASLAND, BOUCK & LEE, INC. engineers, scientists, economists

FIGURE

L: ON=" OFF="REF"
P: PAGESET/SYR-DL
12/15/04 SYR-85-NES DMW